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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,309	08/28/2006	Hans Gygax	30887/04002	2653

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EXAMINER

O'HARA, BRIAN M

ART UNIT	PAPER NUMBER
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3644

NOTIFICATION DATE	DELIVERY MODE
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11/10/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/554,309	Applicant(s) GYGAX, HANS	
	Examiner Brian M. O'Hara	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/11/2010 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 1 and 3-10 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. **Claim 1** recites the limitation of "US Sport's Plane Category regulations" which renders the claim indefinite. It is unclear how this phrase limits the scope of the claims. What is being defined by the regulations? Which version of the regulations are being used; current ones or older ones? Do the regulations only define a maximum take-off weight?

5. **Claim 3** recites the limitation "whose doors" in line 3. There is insufficient antecedent basis for this limitation in the claim.

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6. **Claim 3** recites the limitation "bevel following" in 9. There is insufficient antecedent basis for this limitation in the claim.
7. **Claim 3** recites the limitation "foot side" in 10. There is insufficient antecedent basis for this limitation in the claim.
8. **Claim 3** recites the limitation "final position" in 11. There is insufficient antecedent basis for this limitation in the claim.
9. **Claim 4** recites the limitation "end zones" in 3. There is insufficient antecedent basis for this limitation in the claim.
10. Regarding **claim 5**, the phrase "in the case of the presence of tubing struts" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
11. **Claims 3-10** are rejected for being dependant upon a rejected base claim.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 1, 3, 4, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Firner (US Patent 2,132,529 A).**

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14. Regarding **Claim 1**, Firner discloses a light aeroplane of the ultra light class and sport plane category having a maximum take-off weight of between 452.5 kg and 590 kg, according to US Sport's Plane Category regulations, the aeroplane comprising:

an engine (within "D"; See Fig. 1; also 12 is an engine mount), proximate a nose of the aeroplane, with tractor propellers (in front of D; See Fig. 1);

a cabin cell (B), arranged behind the engine, wide enough for two adjacent passenger seats ("operator and passengers"; See first column of Page 2, Lines 53-55);

a central tube (17), having at least a 200 mm diameter, extending along a longitudinal axis of the aeroplane;

a square profiled tube (10) engaged with and beneath the central tube;

shock strut tubes (See struts indicated as extending from 58 in Fig. 1), for supporting main wheels (58) of the aeroplane, housed in the square profiled tube;

an upward rising tube bend (11), behind and fixed with back side ends of the shock strut tubes (11 extends down to meet 10 near where the arrow for 10 points in Fig. 1), bordered from the front side by a plastic U-shaped profile (See Shape of 43 in Fig. 2) in a cross section and defining a back door frame and a local external outline of the cabin above the square profile; and

a space (B), limited on a lower side by a virtual flat cabin floor, that extends transversely beyond the square profile (B extends out to the left and right further than 10).

15. Firner further discloses that the size of the aircraft could be changed "depending upon the capacity of the craft", however, Firner does not disclose the specific sizes of

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the tubes or cabin space. At the time of invention, it would have been obvious to one of ordinary skill in the art to provided the central tube having at least a 200 mm diameter and the free remaining space above the virtual flat cabin floor presents an orthorhombic space of at least 190 cm in length, at least 45 cm wide, and at least 40 cm in height for receiving a person lying on a stretcher for air-transporting of said person since one having skill in the art would be able to size the aircraft to meet specific flight requirements/ restrictions.

16. Additionally, it is well known in the art that a small aircraft can serve to accommodate a person laying on a stretcher, See for instance US Patents 5490703 A, 5785277 A, 5779296 A, 6585188 B2, 4783025 A, and 4637575 A. It is obvious to one of ordinary skill in the art to size an aircraft cabin to accommodate a person on a stretcher.

17. Regarding **Claims 3 and 4**, Firner discloses the tube bend is obliquely backward inclined (see bottom of 11 in Fig. 1 is angled differently) and extends along the inner cell wall (11 defines the rear bulkhead of the cabin), and the lower side of the end zones of the square profile (10) is braced (via 57) to the struts.

18. Regarding **Claim 6**, Firner discloses two frontward pointed supporting rails (26 and 27), parallel to each other, extend from the front side of the square profile in flight direction (longitudinally), the rails being braced by oblique struts (24 and 25) extending downward to the front side of the square profile element and on said supporting rail a seat (31) is guided into several positions by a carriage.

19. Regarding **Claim 10**, Firner discloses the aeroplane is a single-seater (can be one seat or multiple) for a gliding trailer.

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20. **Claims 3-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Firner as applied to Claim 1 above and over applicant's admitted prior art on Pages 1-3 of the specification, and further in view of www.comco-ikarus.de/ (2003).

21. Along with the web page dated 2003, an English translation with figure numbers added for purposes of discussion was provided on 04/02/2009. The English translation is referred to throughout the remainder of the rejection below.

22. Applicant's admitted prior art states that "the ultralight or ecolight aeroplane presented here is designed using a conventional construction" (Page 1, Lines 14-16) and "Ultralight or ecolight aeroplanes with this basic construction are already known" (Page 1, Line 20). These above two statements including a review of the www.comco-ikarus.de/ reference reveals that the IKARUS C42 has the same design including the same elements as listed in claims 3-10 as the current invention.

23. More specifically, applicants admitted prior art describes the IKARUS C42 with a central tube (Page 2, Line 2), a tube-grate frame (Page 2, Lines 5-6), synthetic panels which determine the aesthetic appearance of the aeroplane (page 2, Lines 11-16), and wing bracings (Page 2, Line 8).

24. www.comco-ikarus.de/ teaches an ultra light airplane with gable shaped arranged shock strut tubes (See Fig. 3), a U-shaped profile (Fig. 3 shows round fuselage immediately behind the wing), a square shaped profile (Portion under wing, See Fig. 3), doors that are fixed above (See Fig. 5), carbon fiber fairings (Page 2), a 100 liter fuel tank (Page 1 50+50 liter tank), welded tube construction with thread

sleeves (Page 2, fittings and screws made of stainless steel or high strength standard elements), and towing of a glider (See Fig. 4).

25. In view of applicant's disclosure concerning the construction of the aircraft, and the technical specifications available on www.comco-ikarus.de/, it would have been obvious to one of ordinary skill in the art to provide the large cabin ultralight aircraft of Firner as described above, with the design elements of the IKARUS C42 as taught by www.comco-ikarus.de/. The motivation for doing so would have been to provide a larger cabin aircraft that is also light in weight to conserve fuel.

Response to Arguments

26. Applicant's arguments with respect to claims 1 and 3-10 have been considered but are moot in view of the new ground(s) of rejection.

27. In response to applicant's arguments, the recitation "having a maximum take-off weight (MTOW) of between 452.5 kg and 590 kg, according to US Sport's Plane Category regulations" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. O'Hara whose telephone number is (571)270-5224. The examiner can normally be reached on Monday thru Friday 10am - 5pm except the first Friday of every Bi-week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy D. Collins can be reached on (571)272-6886. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy D. Collins/
Supervisory Patent Examiner, Art
Unit 3644

/B. M. O./
Examiner, Art Unit 3644